

PATENT COOPERATION TREAT



INTERNATIONAL PRELIMINARY EXAMINATION REPORT 643

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INTERNATI	IONAL PRELIMINARY	EXAMINA'I	10/532643
	(PCT Article 36 ar	d Rule 70)	
Applicant's or agent's file reference 2002P15490WO	FOR FURTHER ACTION		ion of Transmittal of Internatic amination Report (Form PCT/IPEA/4
International application No. PCT/DE2003/003524	International filing date (day 23 October 2003 (23		Priority date (day/month/year) 24 October 2002 (24.10.2002)
International Patent Classification (IPC) or r H03K 19/177	national classification and IPC		
Applicant	SIEMENS AKTIENGES	ELLSCHAFT	
and is transmitted to the applicant a 2. This REPORT consists of a total of This report is also accompan amended and are the basis fo 70.16 and Section 607 of the	ccording to Article 36. 5 sheets, includated by ANNEXES, i.e., sheets	ing this cover shee	onal Preliminary Examining Authority et. claims and/or drawings which have be ns made before this Authority (see R
3. This report contains indications rela	ating to the following items:		
I Basis of the report			
II Priority Non-establishment	of opinion with regard to novel	ty inventive sten :	and industrial applicability
III Lack of unity of inv		y, mventive step e	and medicinal applications
Reasoned statement		d to novelty, inven	ntive step or industrial applicability;
VI Certain documents			
Vii Certain defects in th	ne international application		
VIII Certain observation:	s on the international application	n	
Date of submission of the demand	Date	of completion of th	nis report
29 April 2004 (29.04.2	2004)	13 Ap	oril 2005 (13.04.2005)
Name and mailing address of the IPEA/EP	Autho	rized officer	
Facsimile No.	Telep	hone No.	

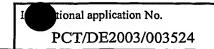
Form PCT/IPEA/409 (cover sheet) (July 1998)



In ional application No.
PCT/DE2003/003524

I. :	I. Basis of the report						
1. With regard to the elements of the international application:*							
		the inter	national application as originally filed				
	図	the desc	ription:				
		pages	. 1-15 , as originally filed				
		pages	, as originary fred , filed with the demand				
		pages	, filed with the letter of				
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		pages					
		pages .	1-5 , as originally filed , as amended (together with any statement under Article 19				
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		pages	, filed with the letter of				
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		pages	1/3-3/3 , as originally filed				
		pages	, filed with the demand				
	_	pages .	, filed with the letter of				
	t	he seque	nce listing part of the description:				
		pages .	, as originally filed				
		pages	, filed with the demand				
		pages	, filed with the letter of				
2.	the in	iternation e element	the language, all the elements marked above were available or furnished to this Authority in the language in which all application was filed, unless otherwise indicated under this item. s were available or furnished to this Authority in the following language which is:				
	片		guage of a translation furnished for the purposes of international search (under Rule 23.1(b)).				
	H		guage of publication of the international application (under Rule 48.3(b)).				
		or 55.3	guage of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/				
3.	With	regard minary ex	to any nucleotide and/or amino acid sequence disclosed in the international application, the international amination was carried out on the basis of the sequence listing:				
		contain	ed in the international application in written form.				
	Ц	filed to	gether with the international application in computer readable form.				
		furnish	ed subsequently to this Authority in written form.				
	Щ	furnish	ed subsequently to this Authority in computer readable form.				
	Ц	The sta	atement that the subsequently furnished written sequence listing does not go beyond the disclosure in the ional application as filed has been furnished.				
			tement that the information recorded in computer readable form is identical to the written sequence listing has rnished.				
4.		The am	endments have resulted in the cancellation of:				
			the description, pages				
			the claims, Nos				
			the drawings, sheets/fig				
5.		This rep	ort has been established as if (some of) the amendments had not been made, since they have been considered to go the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**				
	* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).						
**	Any r	eplaceme	ent sheet containing such amendments must be referred to under item 1 and annexed to this report.				
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT



III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:						
		the entire international application.				
Σ	\leq	claims Nos				
be	ecaus	se:				
		the said international application, or the said claims Nos relate to the following subject matter which does not require an international preliminary examination (specify):				
	3	the description, claims or drawings (indicate particular elements below) or said claims Nos. 1-5 are so unclear that no meaningful opinion could be formed (specify):				
		the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed. no international search report has been established for said claims Nos				
2. A : sec	mean quen	ningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid ice listing to comply with the standard provided for in Annex C of the Administrative Instructions: the written form has not been furnished or does not comply with the standard. the computer readable form has not been furnished or does not comply with the standard.				
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Supplemental Box

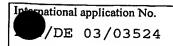
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

- 1) Reference is made to the following document:
 - D1: SKLYAROV V: "Reconfigurable models of finite state machines and their implementation in FPGAS" JOURNAL OF SYSTEMS ARCHITECTURE, ELSEVIER SCIENCE PUBLISHERS BV, AMSTERDAM, NL, Vol. 47, Nos. 14-15, August 2002 (2002-08), pages 1043-1064, XP0004375020 ISSN: 1383-7621
- 2) A programmable logic device with the features as per the preamble of independent claim 1 is known from D1.

Furthermore, D1 is also concerned with the reconfigurability of the logic blocks during the entire period of operation of the logic device — cf. page 1043, abstract, lines 2, 3: "that allows their behaviour to be modified...during run-time", and page 1052, paragraph 6. "Reconfigurable FSMs based on cascaded model". In order to carry out the reconfiguration, as per D1, storage blocks have to be described anew with corresponding data, which, it is stated, can be done using a dual port RAM — cf. page 1054, final paragraph, lines 1, 2. D1 does not discuss the hardware required to supply the new configuration.

With regard to the circuit-related technical features of a module architecture carried out as per the invention, the characterising portion of the present claim 1 states that a configurable



Supplemental Box

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(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

changeover logic block is provided which performs the configuration.

The expression "configurable changeover logic block" is, however, vague and unclear and leaves the reader uncertain as to the meaning of the technical feature in question. The fact that in the device according to D1 as well, the new configuration data has to be supplied via a corresponding circuit is self-evident, as is the fact that this is a logic circuit in which changeover processes take place as a matter of course. In addition, any circuit can be designated as "configurable". The special difference with respect to the subject matter of the invention, and in what way the latter defines an architecture, is not apparent from claim 1. The description, page 6, lines 9-13, according to which in the invention, in contrast to the prior art, "the outputs of this logic block are connected at least in part to the code region of the configurable logic blocks, said code region being inaccessible in other embodiments in operation" is completely incomprehensible. Dependent claims 2-5 do nothing to clarify this either: claims 2 and 3 are themselves unclear, since it is not defined what is meant by "plane", whilst the features of claims 4 and 5 merely relate to the prior art as per D1.

Consequently, the subject matter of these claims is not clear (PCT Article 6).

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

3) With respect to the description, page 13, lines 27-31, page 14, lines 15-18 and page 15, lines 22-27, the "configurable changeover logic block" appears to be an additional PLD ("Extra PLD"), which is equivalent to the "logic blocks with configurable properties", wherein the extra PLD and said logic blocks "not only change over reciprocally, but indeed also bring about the programming of the respective other part". However, no concrete embodiment of this is given in the description/drawings. In this regard, attention is drawn to the fact that the use of a reconfigurable logic circuit to control other configurable logic circuits is in essence known from D1 - cf. D1, page 1061, paragraph 10 "Using reconfigurable FSMs for practical applications".